

CLAIMS

1. A shoulder belt height adjuster assembly for a motor vehicle, the assembly
5 comprising:

a guide rail including a plurality of fixed rail teeth disposed along at least one longitudinal portion;

a slide including an aperture formed therein for slidably receiving the guide rail along the longitudinal portion, the slide including a plurality of fixed slide teeth
10 disposed on an interior slide surface; and

a biasing member operably attached to the slide aperture for selectively engaging at least one of the fixed slide teeth into at least one of the fixed rail teeth; wherein said engagement prevents slidable movement of the slide relative to the guide rail in a downward direction.

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2. The assembly of claim 1 wherein the guide rail comprises a single piece that is substantially U-shaped.

3. The assembly of claim 1 wherein the guide rail comprises a cross-sectional
20 shape selected from a group consisting of a square, a rectangle, an oval, and a circle.

4. The assembly of claim 1 wherein the biasing member comprises at least one bend formation.

25 5. The assembly of claim 1 wherein the biasing member is positioned substantially within the slide aperture.

6. The assembly of claim 1 wherein the fixed rail teeth comprise a saw-tooth configuration.

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7. The assembly of claim 1 wherein the fixed slide teeth comprise a rounded configuration.

5 8. The assembly of claim 1 further comprising:
at least one mount for operably attaching the assembly to the motor vehicle; and
a D-ring operably attached to the slide and to a shoulder belt .

10 9. The assembly of claim 8 wherein the mount comprises a bolt mount.

10. The assembly of claim 8 wherein the mount comprises a hook mount.

11. The assembly of claim 8 wherein the mount comprises a pocket mount.

15 12. The assembly of claim 8 wherein the D-ring is swivel attached to the slide with a D-ring bolt.

13. A method of adjusting height of a motor vehicle shoulder belt assembly,
20 the method comprising:
selectively preventing sliding movement of a slide relative to a guide rail;
sliding the slide in an upward direction by applying an upward force; and
sliding the slide in a downward direction by applying a pressing force and
a downward force.

25 14. The method of claim 13 wherein selectively preventing sliding movement of the slide comprises selectively engaging fixed slide teeth into fixed rail teeth.

15. The method of claim 14 wherein selectively engaging the fixed slide teeth into the fixed rail teeth comprises biasing the fixed slide teeth into the fixed rail teeth with a biasing force.

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16. The method of claim 15 wherein applying the pressing force comprises releasing the biasing force.

17. The method of claim 13 wherein sliding the slide in the upward direction
10 comprises ratcheting the slide to the guide rail.

18. The method of claim 13 further comprising providing at least one mount for operably attaching the assembly to the motor vehicle.

15 19. The method of claim 13 further comprising providing a swivel attachment of a shoulder belt to the slide.

20. A shoulder belt height adjuster assembly for a motor vehicle, the assembly comprising:

20 means for selectively preventing sliding movement of a slide relative to a guide rail;

means for sliding the slide in an upward direction by applying an upward force; and

25 means for sliding the slide in a downward direction by applying a pressing force and a downward force.